

Mantra Gajah.

BY W. GEORGE MAXWELL.

“The book of mantras* used in connexion with elephants ; “taken from the mantras of Tunku Mantri Ibrahim bin Jaffar, “which are in the possession of Che Pandak Abdullah and “committed to writing by Toh Sarif Aman ; mantras which “have come down from the Datohs Sri Adika Raja of Ulu “Perak, Toh Kalaung and Toh Kalalang, to Toh Muda Abdul- “rauf and from him to the present day.”

With these words ends a small Malay manuscript in my possession of which I have made the translation that follows.

Of the persons mentioned I have not been able to discover much that throws any light on the original source of the mantras. Tunku Mantri Ibrahim is the well-known Mantri of Larut, who was banished to the Seychelles after the Perak War and who, in the days of his greatness, owned a large number of elephants. The present Tunku Mantri Muhammad Isa, the Magistrate in charge of Selama, is his son. Orang Kaya Kaya Sri Adika Raja is the title of the principal chief of the district lying in the upper reaches of the Perak river on the northern boundary between the Malay States under Siamese protection and Perak.

To the present Datoh Sri Adika Raja, Wan Muhammad Salleh, I.S.O., I am indebted for much assistance in the enquiries which I have made regarding these mantras.

The first glance at the mantras shows that, while a few are purely Malay, the majority of them are in a language which is not Malay, and that some are partly in one language and partly in the other. The two languages appear even to have

* The Malays have borrowed the Sanskrit word mantra, which denotes a charm or magical formula. I must apologise for its constant use in this article, but it is a word which cannot be adequately translated.

been mixed, or fused, for in some of the mantras which would appear to be non-Malay a great proportion of the words have Malay meanings. Of this, section nineteen contains an example. But this, as will be suggested below, is most probably only the result of the corruption of the sound of non-Malay words in the mouth of a Malay. In order to emphasize the difference between the non-Malay and the Malay words, the former are printed in capitals, and the latter in italics. [In the manuscript, which is in the Malay character, the writer has made use of the Arabic vowel marks in writing the non-Malay words.] Where there are any signs of corruption I have, wherever I have considered it useful, given the meaning of the Malay words. Each of the purely Malay mantras is followed by a translation.

A perusal of this collection of mantras shows that not only is there a mixture of languages but that there is an extraordinary jumble of religions. Rama appears both in the Malay and the non-Malay mantras and is generally placed in antithesis to the Great Sages either of Hinduism or of Buddhism. The purely Malay mantras, which are only three in number, and confined to sections 4 and 5, are of general import only, with no particular reference to elephants. Of these mantras the second begins with *Bi'smi-'llahi'r-rahmani'r-rahimi* and the third ends with *la-ilaha illa-llah Muhammad rasul Allah*.

The Azazil, who is described in the first Malay mantra as a "headman of the forests," is perhaps the Azazel of the sixteenth chapter of Leviticus, who is supposed to have been either a pre-Mosaic Devil or else a spirit of the deserts and wildernesses.*

* "The scapegoat" is the translation of the Revised Version of the Bible, but a marginal note states that the Hebrew word is Azazel. Substituting the word Azazel for the word scapegoat the passage is as follows.

"And Aaron shall cast lots upon the two goats, one lot for the Lord and the other for Azazel. And Aaron shall bring the goat upon which the Lord's lot fell, and offer him for a sin offering. But the goat upon which the lot fell for Azazel shall be presented alive

"The Samil of the first mantra is probably Samhail, of "whom D'Herbelot has the following account:

"SAMHAIL, nom d'un Ange qui gouverne le sixième ciel, "selon les rêveries des Musulmans.

The last mantra calls on Betara Guru and Betara Kala who are identified with Vishnu and Shiva respectively * (The derivation of Betara being the Sanskrit avatara "descent," according to Crawford, or according to Favre the Sanskrit battara, "respectable" §)

In so short a space it would be difficult to find more variety and confusion.

All the elephant owners and elephant drivers to whom I have spoken in Perak on the subject of the non-Malay mantras were more or less—as they knew more or less of the *elmu gajah*—"the science of elephants"—familiar with the words of the mantras and with the medicines prescribed in the book, and one of them who was extremely interested in my enquiries into the *asal elmu*—"the source of the science,"—has recently presented me with another manuscript containing similar mantras.

All my informants admitted their entire ignorance of the meaning of the non-Malay words, and not one of them made the slightest attempt to suggest any interpretation—They all agreed however in ascribing a Siamese origin to the mantras,

"before the Lord to make atonement with him, and to let him go to "Azazel in the wilderness "

D'Herbelot gives a different account of Azazel in his *Bibliothèque Orientale*. He writes as follows:

"AZAZIL, anges qui sont les plus proches du trône de Dieu. "On les joint ordinairement avec les *Afrasils* qui sont les *Seraphins*, "et avec les *Kerubiin* ou Chérubins. Saadi fait mention des Azazil "dans la préface de son *Bostan*: cependant il les comprend tous "collectivement sous un nom singulier; car il dit que lorsque Dieu "distribue ses grâces, Azazil dit, avec une profonde humilité: c'est "de vous seul, Seigneur, que tout notre bonheur dépend."

* Crawford Malay Grammar p. cxviii, and Skeat Malay Magic p. 85.

§ Favre Dictionary II p. 255.

and they unanimously attributed the whole of their knowledge of the capture, training and treatment of elephants to the Siamese.

That the Malays are correct in admitting their indebtedness to the Siamese for their knowledge of elephants is not however admitted by some authorities.

Crawfurd was of opinion that the Malays obtained their knowledge from India. He writes "the popular name for the elephant everywhere is the Sanskrit one, *gajah* * but as the animal is a denizen of the forests of the Peninsula and Sumatra, the probability is that this has arisen from the Hindus having instructed the natives in the art of taming it, a supposition corroborated by the fact that *all the gear and trappings of the elephant with the name of the conductor are also Sanskrit.*" †

In Maxwell's Manual of the Malay language, the rash concluding statement is considerably modified as follows.

"The elephant is most generally known over the Archipelago by its Sanskrit name *gajah*. Sanskrit terms are also used to signify the driver of an elephant and several articles used in connexion with the animal."

The following list‡ is given.

<i>English</i>	<i>Malay</i>	<i>Sanskrit.</i>
Elephant	Gajah	gaja.
Elephant driver	Gambala	gopala (herdsman).
Goad	Kosa	ankuṣa.
Foot chain	anduwan	andu (chain).
Front part of the head	Gomba	Kumbha.
Unbroken, vicious, <i>musth</i>	meta	mada.
Hobbles	sengkela	ṣṛinkhala (chain).

* *Biram* is used in many hikaiats instead of *gajah*. Its derivation is not given in any Malay dictionary in my possession.

† Crawfurd Malay Grammar p. clxxviii. The italics are mine.

‡ Another word might be added. *Mengkuna*, the Malay word for a tuskless male is obviously the Indian word *Muckna*.

"From these circumstances we may probably conclude, with Crawford, that the art of training and domesticating elephants was first learned by the Malays from natives of India. The words of command used by elephant-drivers in the Malay Peninsula appear, however, to be adapted mainly from the Siamese, and it is from this people that the Malays of the continent have acquired much of their modern knowledge of the art of capturing, subduing and training the elephant."*

With all the deference that is due to these two authorities, I suggest that the truth is possibly contained in a legend which is preserved in the thirteenth *cherita* of the *Sejarah Melayu*. The story is as follows. "The headman in charge of the elephants of Sultan Mansur, King of Malacca, was Sri Rama, a Kshatriya by birth (*asalnia shatria*). [Incidentally we are told that he was a drinker (*peminum*), and that always, when he presented himself before the (Muhammadan) King, arrack was given him to drink]. One day Kanchanchi, the elephant that the king himself always mounted, escaped into the forest, and all Sri Rama's efforts to retake it were unavailing. Then Sri Rama said "there are, too, people in this country, who know (about elephants)" (*ada juga orang yang tahu didalam negri ini*),† and he reported the whole matter to the king. Thereupon the king ordered enquiries to be made through Malacca to discover if by chance there was any one who knew the science of elephants (*elmu gajah*). Now at this time the king of Malacca had as prisoner Maharaja Dewa Sura, the king of Pahang, a country abounding in elephants, and it was reported to the king of Malacca that Maharaja Dewa Sura was deeply versed in the science of elephants (*terlalu tahu elmu gajah*). A message was sent to Maharaja Dewa Sura who undertook to recapture the elephant on the condition that he was set free from the prison in which he was confined. He was accordingly

* Maxwell. Manual of the Malay Language, p. 18.

† With all due deference, I submit that Dr. Leyden by translating these words in the Malay Annals as "there are people who are acquainted with the interior of this country" has missed the whole point of the story :—

“released, and forthwith caught the elephant. Thereafter the king of Malacca ordered all the young men at his court to learn the science from Maharaja Dewa Sura; for it was the king’s custom, whenever any person was very skilful regarding elephants or horses or in the use of weapons, to have the youth of his court taught by that person at the king’s own personal expense.”

The salient points in the story are that the headman of a Malay king’s elephants was a Hindu of the warrior caste (who, at the present day, would perhaps have been known as Ramasami); that he was aware of the existence in the country of a knowledge of the art of catching elephants, whereas apparently the Malay king was not aware of it; that in the king of a country on the east coast of the peninsula, far removed from the influence of India or Sumatra, was found a skilful exponent of the art; and finally that his art differed from that of the Hindu.

It is suggested that it is possible that the deductions which may be made from a purely legendary story may have some foundation in fact; that is to say, that, when the invasion of the Peninsula from Sumatra took place, the invading Malays brought with them a knowledge of the training of elephants derived from India, but that at the time of the invasion the inhabitants (whoever they may have been) had already a knowledge of the management of elephants.

My efforts to discover any Malay tradition regarding the early history of the art of elephant training were not successful. In answer to my questions, my Malay elephant driver friends were able to state regarding these mantras very little more than they were *katurunan deripada siam* “descended from Siam.” For as many generations as they could count they were convinced that the mantras had been in the hands of their Malay ancestors. They knew no tradition of *siam* elephant catchers or elephant trainers being in the country. They had no idea why the *siam* came into the country nor why they imparted their knowledge to the Malays. How, why or when they acquired their present knowledge they could not say, but of one thing they were certain and that was that it was *katurunan deripada siam*.

It is well known that the Malays have the same tradition regarding the old mining shafts that are to be found in various localities throughout the Peninsula. Everywhere they are called *lumbong siam*. "Siamese mines." In the gold area of Ulu Pahang I have even heard the word used as a verb with reference to land that had been so extensively pitted as to be practically worthless. *Tanah itu sudah siam* a Malay will say, meaning that the land has been worked out by a long-past generation of "Siamese".

It is, I believe, a generally accepted theory among scientists that these shafts are not really Siamese, but are the work either of the Indonesian race whose tools were the *batu lintar*, or else of the Mon-Khmer race who populated the southern part of Indo-China before the invasion of the Lao, or Thai, from the north. (As members of the society will remember, the affinity of the Mon-Khmer language with the dialects of the "aboriginal" tribes of the Malay Peninsula was pointed out by J. R. Logan* and elaborated by C. O. Blagden †) I was therefore anxious to learn whether the Malays ascribed the mantras and the mining shafts to the same period or to the same race of *orang siam*. But this connexion of ideas appeared to be new to them, and they could say nothing more definite than "perhaps."

An examination of the mantras shows that they consist of more or less corrupt Siamese words, the uncouth sounds of the words probably having been considerably altered in the mouths of the Malays during the generations that the mantras have been in use. It is probable that though the mantras are now preserved in manuscripts their commitment to writing is only of recent date. For instance, the manuscript now translated is only twenty-six years old, and there is nothing to show whether it is a copy of an older manuscript or a collection of mantras committed to writing for the first time. Of what Colonel Yule termed Hobson Jobson words we probably have two excellent examples in sections 9

*Journal of the Indian Archipelago vol. IV. p. 345.

† J. S. B. R. A. S. No. 27 p. 21.

and 10. *Si Kambing Hutan* means in Malay "the goat-antelope of the forest" (the serow, *naemorhaedus sumatranus*). *Kumbang* is the generic Malay term for a beetle, and no particular species is known, so far as I am aware, as *Si Kumbang Hutan*, the forest beetle. And neither goat-antelope nor beetle can have any possible connexion with either mantra.

A Siamese to whom I read over the mantras recognized the Siamese sounds and words in them, but every now and then a mantra or part of it would puzzle him and after trying various sounds and tones he would say that that is was not Siamese.

If this is really the case, the question is whether the words are merely so corrupt as to be unintelligible, or whether they are in another language.

The text shows that the principal object of the mantras is to avert misfortune: they are defensive rather than aggressive. The terms used to denote the various kinds and degrees of misfortune require a word or two of comment. The general term is *pilak*, which, though it is not to be found in Malay dictionaries, is a fairly common, and, I believe, a purely Malay word.

Bahdi, *genaling* and *jinggi* are practically synonymous terms for evil influences which the Malays believe to be brought into play by the death or capture of a wild animal. (An account of the Malay ideas on this subject, with a collection of mantras and a description of the driving out of the *bahdi* will be found in an article by the present writer in Blackwood's Magazine for October 1903). For *bahdi* a Sanskrit origin from *vadha*, killing, has been claimed.*

Genaling, though now a Malay word in ordinary use, appears, with an antithetical form *gunaling* in the non-Malay mantras, and has perhaps a non-Malay origin. If its origin is Siamese, it must have become somewhat corrupted as there is no "g" in Siamese.

Rengab, a word which appears frequently in the mantras and in the text, where the compound from *pe-rengab* is more

* Maxwell. Manual of the Malay language p. 34.

common, and which is used by Malay *pawangs* to denote a charm which extinguishes an enemy's power of inflicting an injury, is the Siamese word *ra-ngab*, an antidote.

Chang is the Siamese for an elephant and the meaning of the frequent expression *Om rengab maha rengab chang rengab* is therefore obvious.

Chengrai which also appears both in the text and in the mantras is used in Malay to mean any mishap or mischance, (with a curious special application to the rite of circumcision) is the Siamese word *chang-rai*, ill fortune or ill omen. (Both *rengab* and *chengrai* will be found in Wilkinson's Malay dictionary as Malay words.)

Chemahang is described in section 83 of the mantras as being in a language that is not Malay, and it is translated for the benefit of the reader. (*Chemahang arti-nia bhasa malayu kena pilak gajah atau kena pilak kayu atau kena chengrai atau kena bahdi yang besar*). I cannot find the word in my Siamese dictionary, but suggest that the Malay word *jembalang*, an evil influence, is a corruption of it or connected with it.

The first thing that is desired is a translation of the non-Malay mantras. It is not within my power to attempt such a translation. All that I have been able to do is to provide a literal translation of the Malay text and Malay mantras. Apart from the translation of the non-Malay mantras, we are confronted by many questions which demand answers.

Are similar mantras in use among the Siamese?

Do these mantras contain any element that is not Siamese?

If so, what is it, and is it possible that the Siamese lore is superimposed upon an older system?

Apart from the mantras, an examination and comparison of the Malay and Siamese systems of elephant catching and training may assist us in our enquiry, and for this purpose I have given in an appendix a brief account of the Malay system with a list of some of the technical terms used in connexion with the training-stocks and a list of the words of command. The first list was compiled by me in Perak and the second is copied

from the one supplied by my father in the second number of the Notes and Queries of this society. It will be seen that the words of commend used in Perak differ from those in Kedah, and that they certainly are not Malay words.

Lastly, is there any similarity between the Malay and the Siamese system of the medical treatment of elephants? In an appendix I give a list of the plants mentioned in the Malay text, and Mr. H. N. Ridley has been kind enough to supply their scientific names with a brief description.

It will be noticed that many of the remedies are symbolical. The use of three or five limes, that grow on a single stem, mixed with the love grass, that clings to every thing, is given in section 47 as a devise to make a wild male elephant remain with a herd of females. The medicine to prevent an elephant from swinging its tail is the rubbish that collects round posts that stand in a stream and shake to and fro with the force of the current. (section 57). To make an elephant return to its master's house of its own accord from the forest the remedy is to take the cooking place, ladder and threshold beam of an abandoned house and to give fragments of them to the elephant with its food (section 80). To make an elephant fat one remedy must be given during the full moon and while the elephant is standing in water above the swelling of its belly, and another remedy must be given when the moon is rising. (section 78).

The remedies include such extraordinary articles of diet for a herbivorous animal, as rhinoceros' navel (section 78), fish (78) prawns (75) and oxhide.

The use of arrack (section 62) is hardly orthodox perhaps among Muhammadans even as a medicament for an elephant, but the prescription in section 83 of water from a pig's wallow is most extraordinary, for it would be difficult to imagine anything more abhorrent to the average Malay.

Many of the plants mentioned such as *kunyit trus*, *lengkuas*, *jenjuang*, *galenggang*, *gandarus*, from part of the ordinary pharmacopeia of the Malays, but it will be interesting to know to what extent the remedies have been borrowed from, or are common to, Siam.

A LITERAL TRANSLATION OF THE MANTRA GAJAH.

(Note. In the mantras Malay words are printed in Italics, Non-Malay words in Capitals).

This is written to set forth the mantras used in connexion with elephants. If we intend to build an enclosure in which to catch elephants, or if we wish to look for a suitable site for such an enclosure, or to select the best place for the gate of the enclosure, or if we desire to snare an elephant either when confined in the enclosure or at large in the great forest, in all these cases it is necessary that we should know the teaching of learned men and the auguries and signs, and then perchance God Almighty may grant a safe and prosperous issue to our undertaking.

1. If, when we inspect the proposed site for an elephant enclosure, we find many ant-hills in it or much earth that has been undermined by ants, that place is not a suitable one and much sickness will result if it is used. If there are two trees growing there so close together as to resemble stocks, or if two trees grow there interlocked, or if dead stump is there, the place is not a good one. It is not a good place if in it there are roots or jungle creepers twisted into inextricable knots, whether it be on the ground or above it. And it is a bad place if there is in it a hard wood tree of which part is dead and part alive.

2. This deals with the selection of the site for the gate of the enclosure. If there are jungle creepers growing one on top of the other the place is not good, nor is it good if a white ants' hill or any large ant-hill is found in front of the gate or within the enclosure. It is not good if there is low lying flat ground in front of the gate or within the enclosure. If in front of the gate two branches of trees have joined and grown together or if the gate is overhung by interwoven creepers, the place is not good one for the purpose.

3. This deals with the lore in connexion with cutting the wood for the post of the gate to the enclosure. When the first chip falls from the axe to the ground we look carefully to see whether the bark is uppermost or not. If it fall with the bark

underneath the wood will not do for the gate post, but if the bark be uppermost the wood is well suited.

4. Now when we burn the candle in front of the smaller enclosure to learn the augury whether the elephants will be early or late to enter the enclosure we should look at the wick of the candle : if the wick bends in our direction, that is a sign of the guarantee of the success of our enterprise, and if it bends away from us it is a sign to the contrary. If the wick bends to the right it is a sign that we should take the task in hand further to the right, whether our intention be to make an elephant enclosure, to select a clearing for hill padi or to build a house. If the wick bends to the left, we should go to the left. But if the wick bends over in a ring so that the end meets the stem, we must not utilize the ground for any purpose ; nor is it good if the wick burns with a double flame like the twin gravestones over a tomb. Nor is it good if the wick in burning becomes twisted. But if the wick burns upright and the flame rises straight, then the place is good one both for an elephant enclosure and for a dwelling place : and by the blessing of God our enterprise will be protected. And we shall obtain an advantage and freedom from danger if we repeat this charm when we light the candle.

‘ HEI JEI SIK PAK KALAK JEISAK PREI SHARAPAN CHAN-
GRAI SAHA MAIHIN KAKA NILU AH AH AH.’

or we may use this charm.

*As-salam aleikom
Hei sri chahia.
Janganlah engkau berdusta.
Dan janganlah berbuat bohong kepada ku.
Akulah bersipat dengan sipat tuan.
Angkau bersipat dengan sipat hamba.
Tunjuklah alamat yang sabenarnia kepada ku.
Aku jadi deripada nur Allah
Angkau jadi deripada thelmak Allah
Aku menanggung amanat Allah
Angkau menanggung khianat Allah
Akulah bersipat hu berkat Ilaallahu*

[Hail ! bright and gracious one ! Do not be untrue to me, and do not make a lie to me. I stand here as master, you as slave. Show me a true sign. From the brilliancy of God is my creation, yours is from the darkness of God. I am supported by the protection of God, you have abused the confidence of God. I have the attribute of the blessed saying "Allah is God."]

5. This deals with the opening up of forest that has never before been put to any use by man. It may be that we intend to make an elephant enclosure, or to dig a ditch, or to cut a water course for a mine, or to dig a hole for the posts of a house, or to dig a hole for the gate posts of an elephant enclosure, or to put up its fence : in all these and similar cases we must avail ourselves of all the auguries and lore in connexion with the matter and then perchance the blessing of God may attend our enterprise and give it a successful issue.

We first apply to the *penghulus* [headmen] who hold sway over the forest, and this is our petition.

Bi'smi-'llahi'r-rahmani'r-rahimi.

Hei Azazil dan Samil Akbar.

Angkau hukomkan seklian anak chuchu chichit mu.

Jangan angkau bri mengaru-ngaru menyakiti MARA-

NA JANAI aku,

Dan anak buah aku,

Dan anak istri-ku,

Dan rumah tangga-ku,

Dan segala tanaman-ku,

Dan segala kahidopan-ku,

Dan segala kerja buat-ku,

Dan segala kampung laman-ku

Aku berdiri dengan firman Allah Takla.

Aku berkata kahandak Allah Taala.

Berkat ya hu hak.

[In the name of Allah the merciful and compassionate. Oh Azazil and Samil Akbar do ye order all your children, grand children and great grand children not to interfere with me nor to bring sickness upon me, nor upon my children, my

family and my household, nor upon any living animal of mine, anything that I have planted nor any work of my hands, nor upon anything within my yard or ground. I stand here with the command of Allah Taala, I speak the will of Allah Taala. By the blessing of YA HU HAK.]

And when we have said the above we say the following words.

*Hei Betara Guru, Betara Kala.
 Angkau hukumkan segala raiat mu.
 Jin dan bota, segala iblis,
 Segala jemalang dan segala pilak dan bahdi,
 Segala hantu sheitan dan segala iblis.
 Aku minta hukumkan kapada mu,
 Jangau angkau bri mengaru-ngaru menyakit-nyakiti-ku,
 Dan anak istri-ku,
 Dan segala hamba sahaja-ku,
 Dan segala kahidopan-ku,
 Seklian SAKI BEGAI ku.
 Jangan angkau bri segala raiat mu mengaru-ngaru dan
 merenchanai.
 Aku pun sa'orang hamba Allah,
 Angkau pun sa'orang hamba Allah,
 Mari-lah kita bersahabat.
 Dan ber kasihkasihan dengan-ku.
 Dan aku duduk didalam afaatillah.
 Angkau duduk didalam murka Allah.
 Berkat lailahailallah.
 Muhammad rasul Allah.
 Ya Hu Hak.*

[Oh Betara Guru, Betara Kala, do ye order all your servants, the jins, the *bhuts*, all the devils all the powers of mischief all the spirits of Satan and all his devils. I ask you to order them to obey you. Do not interfere with me nor bring sickness upon me, upon my wife and children nor upon my slaves nor upon any living creature of mine. Do not allow your servants to interfere nor make mischief. I am a slave of God as also are ye. Come let us be companions and friends. I dwell in the handiwork of Allah : you dwell in the wrath of

Allah. By the blessing of the saying "there is no God but Allah, Muhammad is the prophet of Allah." YA HU HAK.]

6. This deals with the driving away of forest spirits. We can either drive them away or order them to stand aloof. Whenever we enter upon any enterprise in the great forest or begin to build the larger or smaller elephant enclosure we must repeat the following mantra.

OM KILAI MAIYUT KACHARI KACHARI KILAI DAK

KILAI *dan terbang* KACHANG *ka kanan sah pindah turun* KA WAI HANTU KAMAT KAMAIA NYAMISAN CHANGRAI MAIYU KATUWAI [Fly to the right: without fail leave your place and descend].*

7. This deals with the forest spirits. We either order them away or command them to stand aloof when we are driving the elephants into either the larger or the smaller enclosure. We first repeat the mantra; then we blow with our mouths to right and to left, and then we set off to drive the elephants. This is the mantra.

OM BARAH BARAI PATARI PANARAI PATA BUNA RAAMIA-

TIN *sah pindah ku turun* LAWI MARAATANGON KAMAI KAMAYAL. [Without fail leave your place and descend].

8. This is the mantra to use when we invade the forest, and it can be used over the *kunyit trus* § that we give to the men as they enter the forest to drive the elephants or it can be used when we ourselves enter the forest.

OM BIK BIK BANG BANGTU BANGRU BANGTI PADA BANG

KUMAI MAYA OM RENGAB SARAPA RENGAB.

It is used for the big elephants as a *perengab*. † Another mantra that has the same effect is the following.

* As is already explained, the words in brackets are a translation of the Malay words only of the mantra.

† A *perengab*, or *rengab* charm is one which extinguishes an enemy's power of inflicting an injury.

§ For *kunyit trus*, and other plants see the appendix.

OM KANCHING KANDAI RON PITAI NAKA NARA RU PIPAT CHAMDI
ROM TI' PAMAN DAPUN SARAPA RENGAB.

9. The name of this mantra is *Si Kambing Hutan*, and we use it when we are about to enter the great forest, or to clear the boundary lines for either the larger or the smaller enclosure.

It is as follows.

OM BANGCHONG BANGDI BANGRU BANG TIPAT BANG
KAMUD KAMAYA OM SARP BANG SIDIKAN GURU AMBUB ATI-
YAH.

10. The use of this mantra is to drive away the spirits when we are about to enter the forest, and the name of it is *Si Kumbang Hutan*.

OM BIK BANGTU BANGDI BANGUI PADA BANG KAMUT MAYA OM
RENGAB SARAPA RENGAB *puah kakiri puah kakanan* [turn aside
to right and to left.]

11. This is a *perabun** charm for elephants. We repeat it when about to enter the forest, whatever be our work, and no misfortune will befall us.

ON GENALING PACHANARU PACHANARI SERBANG KOM
BANGKAK TAKA BANTING LAIPAT PUCHUPAI BANG KOM
BANG KUMAYA.

*turun kau pindah kahutan yang pana puah karab turun
kapadang yang mahaluas karimba yang maha besar
salah ka kanan ku salah ka kiri ku puah.*

[Descend, move away to the boundless forest, in silence descend to the wide plain, to the vast forest ; you are wrong if you turn to right or to left. Avaunt].

12. This is a *perabun* charm which we use when we are seeking a solitary elephant, or when we enter the forest to drive a herd into an enclosure, or when we wish to drive away the forest spirits. It keeps us from all misfortune and mischievous influences in every enterprise in the forest.

* A *perabun* charm is one which dulls the senses of an opponent and makes him unaware of our presence.

OM GENALING PANCHANARAI SERBANGKOM BANGKAK
TAKA BANTING LAIPAT PACHUPAI BANKOM BANGTI KOMLING
KUMAYA *turun kau pindah kahutan yang pana puah karab*
turun kapadang yang maha luas karimba yang maha besar
(practically the same as No. 11).

13. This is the mantra we use when about to drive the herd either into the large or the smaller enclosure. We repeat it over the *kunyit trus* which we then sprinkle in the direction taken by the herd; and then with our mouths we blow in the direction of the gate of the enclosure.

OM KUNDANG DING KUNDANG SAI TALAUNG TEGULING
DI PANTAI RAMBUT TEGULONG DI HADAPAN KU TIBA
KANAN TIBALUN KIRI KU SIKAB PIAH NITIK MU HEI CHANG.

*Aku tahu asal mu menjadi,
Deripada markubulikam mulia.
Kau turut kata ku,
Jikalau kau ta'turut kata ku,
Mati di bunoh Sri Rama,
Jikalau kau turut kata ku,
Di hidopi maha Rishi.
Kaluh! Kaluh! Kaluh!*

[I know whence you had your creation. It was from Markubulikam the noble. Do you obey my words. If you do not obey, you will be killed by Sri Rama; if you obey, you will be kept alive by the Maha Rishi.

Kaluh! Kaluh! Kaluh!]

14. This is a *perabun* charm for elephants, and we repeat it whenever we enter the great forest or any virgin forest that has never been trodden by man. It is an invocation to drive the forest spirits away from the elephants.

OM GENALING PACHANARAI SERBANG KOM BANGKAK
TAKA BANTING LAIPAT PACHUPAI BANGKOM BANGKUMAYA
turun kau pindah kahutan yang pana puah karab turun
kapadang yang mahaluas karimba yang mahabesar.

(practically the same as in No. 11).

15. This mantra is called the King of the Elephants.

We go to some high land and make a hole in the ground by turning round on our heel, and we take the earth which we have thus worked out of the hole and over it we repeat the mantra three times in a single breath. We next put the piece of earth upon the crown of our head; then we put it down on the ground in front of us, and again we put our heel upon it, and turn round on it three times repeating the same mantra three times again in a single breath.

The use of it is to stop the herd and to prevent it from going far.

OM PAWPANG MAHA PANG PIT OM TAW SAHOM
SITIKON TANA SAHOM.

16. This is to keep the herd fixed in one place and to prevent it from going far. The meaning of it is "in chains."

OM BANG CHANG BANGDI BANGTU BANGRU BANGTI
PADA KAMU KAMAYA OM BANG SARAPA BANG AH AH
AH.

17. This mantra will restrain the elephants, and prevent them from going far. We break a stick into eight pieces, or we break it into many pieces, as we walk round the place where the herd is feeding or resting; and as we thus surround the herd we repeat the mantra.

PANTANG POK CHAKAI TAMANG POK CHAKAI SANGKANG
PAK CHAK AI.

18. This mantra is used when the elephants have entered either the larger or the smaller enclosure. It is repeated over the *kunyit trus*, which the *bomo* * then either himself sprinkles all round the enclosure or gives to the men to sprinkle. While this sprinkling is being performed one must not cross the enclosure.

IKRIMIN PUNI CHI CHANARAK.

* The *bomo* is the man in charge of the operations. He is selected for his knowledge of the mantras and of the rites, and for his experience. He generally has some pupils under him who are known as the lesser *bomos*.

19. This is the mantra we use when we arrange the noose to prevent it from afterwards slipping from an elephant's foreleg.

OM KAW KATA CHANGRAMAI KU IKAT PEKARANG KU
SERTA PEGANG KAU PERANG LENGAN TANGAN KITA SERTA
KANCHUBKAN KAKI KITA.*

20. When we are about to noose a big elephant, and are putting the noose in position, and spreading it out, we pay our respect to Nabi Noh, † and ask for permission to use the tree to tether a *raiat* of Nabi Sleman. When the noose is spread we sprinkle it with *kunyit trus*, and then draw the slip knot, and after that has been done we repeat this mantra. It is a *rengab*.

OM BAT KU CHABAT DIRADAI BAWBANGKAT CHANG
PAJA NAK KARAI OM MAHA RISI BU KATARAK
TAN PARA KAMTU.

And again we sprinkle the *kunyit trus*.

21. This is a *perabun* which we use when about to snare an elephant in the enclosure, or about to snare a very cunning elephant in the forest.

We repeat it when we have spread the noose, or we may repeat it over the *kunyit trus* which we may then sprinkle upon the noose.

OM GENALING BATING TAMDIT BATKALING SALIK
SANTOM OM KAMIN PALAI RANG HA TAMKU LIMA-
PAINA KARKU LASANTOM.

This is an alternative form.

OM CHAW TAW PALAI RANGKA TAMKU LIMAPAINA
KAILIM PARAK NAK TAWTA WANTA.

* Many of the words of this mantra are Malay, though they do not form a sentence. Their general sense is "tie, hold our hand (or foreleg) and fasten up our leg."

† Nabi Noh (the patriarch Noah) is supposed by the Malays to be in charge of all trees and plants. All animals are under Nabi Sleman (King Solomon).

22. This is the mantra to use when we are about to snare an elephant in the forest or in the enclosure. We use it because we are letting loose the forest spirits, and we repeat it when we set the noose.

OM KANCHING KANDAI KAI PITAI LAKAROM KAU CHAKAN TANGLAH KON LANGKA PARBU MUHA PURSIDI KAU GURU AMBU YATI.

23. This is a mantra which the lesser *bomos* use when they intend to noose an elephant inside the enclosure. If the chief *bomo* is present he repeats it and the lesser *bomos* say it after him: if he is not present they repeat it without him. It sets them free from all powers that bring misfortune and mischief.

OM GENALING CHAP CHAP GUNALING RENGAB GUNALING OM CHAP GUNALING SAH SUHAI.

24. This is a *perabun* for a cunning elephant that is suspicious of the noose that we have set for it, and that refuses to go near it. We repeat the mantra over some dainty such as sugar cane or plantain which we put in a place where he will see it and eat it.

PARDOM BANGKOM SUHAI.

25. In order to set a big elephant* free from all evil influences when we take it out of the smaller enclosure we repeat this mantra over some *kunyit trus*, which we sprinkle over the elephant from in front.

OM GUNALING PARIH PAMPARIT PAI PANA BARASIN MARONG SALIK SAMSATOM SARPATOM PARPAI TATBON TINGTAI PAT KAUCHAT PI HAI HAKATITOM BANGTOM
turunlah pindah kau kahutan pana puah karimba turun kau kapadang yang mahalua karimba yang maha besar puah rengab. (practically the same as in No. 11.)

26. This is what happens when the chief *bomo* makes a feast. We make every kind of sweetmeat and sweet thing,

* The bigger the elephant the stronger its attendant influences of misfortune and mischief.

and gather together all the men who are working in the enclosure, and we all eat together at the gate of the enclosure. We make a prayer that all harm may be averted from us, after that we repeat this mantra three times at the gate of the enclosure.

PAWBOB YABOB KINDI JUDI TANGPCNG NGAI MALAB
MIA JI CHANAK PASTA TARU CHAIKOL CHAKUKAING.
This is an alternative form :—

OM PUAN OM NYAMIDAK MIDANG MIDAK TIKALANG
SATAYANG CHADIN KARAI PAROK PANGALOK TAWMU
CHAK KAUCHAK TOM.

27. This is what happens either when the chief *bomo* or the subordinate *bomos* make a feast. The feast can be made either at the gate of the enclosure or in the middle of the enclosure. We invite our friends and feast; and we supply the following materials *bras kunyit* (uncooked rice dyed with turmeric) and *bras basah* (washed uncooked rice) and *nasi pulut* (cooked rice of a glutinous kind, *oryza sativa*), every kind of sweetmeat, a fish, a little gold and a white cloth. We place these things either at the gate of the enclosure or in the middle of the enclosure, and we breathe (*jampi*) over them the following mantra.

PARPOM CHANTI RANG TURUN DISITU KARONG PALI
PARPAI CHAUPANANG BINGKALA KIN LIYURAK SAMA-
HALAB MAHACHAI KAIKU ISON RAKAI TANGNAU SUKUN
LYU KAULAB KAU KHAN KAIKU KAIKU KAIKU AH AH
AH.

28. This is the mantra we use to ask the spirits for the elephant when we are about to put it in the stocks, where it is kept while being taught the words of command.

OM BAWK KAU NAK KAU NAI RENGAB PATSUWAT
PATSUWAT PATSUWAT.

Then straightway we strike the elephant three times with the goad, and the elephant will scream when we do it. Thereupon the elephant will cease to be disobedient, and will obey us.

29. This is a mantra to expel the spirits of the *renat* [the flooring of the stocks]. When the flooring has been made, and we are ready to put the elephant in the stocks, we sprinkle the flooring with *kunyit trus* and sweep it with the leaves of *chandarwal* and *salanchang*.

OM BARANG BARAT PIKAT PIKAU CHANG RAMBIN
PARAI *sah pindah kau turun lari hantu rimba puah rengub.*
[move from hence, flee away down, spirits of the forest.]

30. This is the chief of all the mantras used for elephants. We use it in all undertakings and it is the first that we repeat. We can especially use it when we are ready to put an elephant in the stocks, or wish to take the goad to an elephant that has been taken out of the stocks. In the latter case, sitting on the elephant's neck we strike it with the goad, and then throw the goad away behind the elephant. Another man picks it up, and takes it and shows it to the elephant. This is done three times, and each time we repeat the mantra.

OM GENALING GENALI GENALING NUKTING GENALING
NUKTAI KOT KOT TAKONG KALA GUMLUT KOT GENA-
LING TAKONG KALA OM SINGKU PASING CHANGRAI OM
SAH KUPASAH CHANGRAI ARAH ARAH TARONG PRAT
TINJAU BALI TURUN BERTANTI SALAH DIBATANG
TUBOH KU WI MITARAU KAUMILUH SIDIKAN GURU
BATIA PARAKAU HEI GALUH AH AH AH.

31. The name of this mantra is the King of the *Bomos*. We use for an elephant with a sore head or fever or pain in its stomach. The signs of fever in an elephant are firstly that a quantity of steam rises from its head after we have bathed it, and secondly that its head is very hot.

We may also use the mantra when we take an elephant out from the smaller enclosure: in that case, we sprinkle some water on the elephant's head after repeating it.

OM PATA BURA MAISAN KAU CHA NGAU ANGKAT MA-
TANG PIN PINDAH AU KAU KOKLAK MATA CHANGRAI
CHANGRAI KACHAT PI TOKPAMIN KUMI PAILU
SARAPA CHANGRAI CHANGRAI KAU MIMAN TARA

ANGLAIA SITIKAN GURU MU YATIA OM SITIDAK
SITIDANG SITIGARANG KANA PARAK BATU SAM
DIAU SAMDAK SAKAIAK SAKAIAK SAKADONGNA ANG-
NONG CHAMPARAN SIAN ANGNONG CHAMPARAN PAT
PAT CHANGRAI ANSAKSI PATARADI SARAPA CHANARAI
MATARANG CHANGRAI KAU MIMAN TERINGLU SITIKAN
GURU MU BATIA.

32. If an elephant is sick or has fever this is the mantra which we repeat over the water with which we wash it. We may also repeat it over *kunyit trus* which we squirt from our mouths over the elephant. We do this for three or four mornings or evenings.

OM PAPARU PAPARAI PANARI PANARAI MAHASA MA-
HASA KUNTA PARAH SRI RAMA PARIT TARANG SITI
KAN U MAHA RASI RASI YAKTAMA RAHI PARAI AURAB
AWAI DAI MUONG SARAPA ANGKAU PERONGKAN SAK-
ANG SAKOM SARAPA RENGAB SITIKAN GURU MU
BATIA.

This is another mantra.

OM GENALING GENALING PARAH POM PARAPAI TAT-
BAN YANG KOI PAT KACHAT AI CHAKAT TOM BANG-
TOM.

*turun kau pindah kau kahutan pana puah turun kau
kapadung yang maha luas karimba yang mahabesar.*

[practically the same as in No. 11.]

33. This mantra is used with unfailing effect to expel all evil influences from a big elephant. It is repeated over *kunyit trus* which is then sprinkled over the elephant.

OM GENALING TING CHANDAPA GENALING ANTING
KEMALUT BITI BITI GENALING YAKUT YANATA YAPA
PAROM PARNANG GENALING WAI SITIKAN GURU MU
BATIA OM RENGAB.

34. To drive away the forest spirits from the little baby elephants we use this mantra.

OM PANIRANG PANARAK *maka jauh angkau pindah kahu-
tan pana puah karimba yang maha besar turun kau kapadang*

yang mahaluas. [practically the same as in No. 11.]

SIDIKAN GURU KAU OM BAK BATIA.

This is another.

OM CHAWI CHAWAT CHAWI CHAMEAT MADA CHOH *Kau pindah kahutan pana puah karimba bahana turun kapadang yang mahaluas turun karimba yang mahabesar.*
[practically the same as in No : 11] KAMAI MAIA.

35. This is a *perengab* charm for a big elephant. We may either repeat it over *kunyit trus* which we sprinkle over the animal or over *chandarwal* leaves with which we then brush it. If the evil influences are strong we sweep the elephant with a black cloth instead of with the leaves.

OM RENGAB MAHARENGAB CHANG RENGAB UNDAI RENGAB PITI PIAT YAKAROM RENGAB RAKANGLANG KARAHAI RENGAB PADAPAI MAN PONG OM RENGAB MAHARENGAB.

36. This is a *perengab* charm for a disobedient elephant.

OM RENGAB CHANGRENGAB PITAI YAKARU RENGAB PARYOM POM RENGAB RANGKONG KANG KAMARAI RENGAB PADA PAMAN PONG RENGAB MAHARENGAB SIDIKAN GURU AMBOK BATIA RENGAB.

And if the elephant is very disobedient indeed, and refuses to obey us, this is a mantra which may be repeated over the food we give it.

OM RENGAB CHANGRENGAB DAI RENGAB PITAI PIAH YAKAROM RENGAB PARIOM APOM RENGAB RANGKONG KAMARAI RENGAB PUAH RENGAB.

And this is yet another mantra for a disobedient elephant.

OM PADA PAYAMAN PONG OM RENGAB MAHARENGAB SIDIKAN GURU AMBOK BATIA.

37. When an elephant has been in the stocks for three days and we take it out for the first time and bring it down to the water to drink and bathe, we should repeat this mantra.

OM GENALING TANG CHANDAP GENALING ATING KAMALUT GENALING YAKOT YANATA BANA PAROM PARANANG WAI SIDIKAN GURU MU BATIA RENGAB.

38. This is a mantra to ward off evil influences from an elephant when we are taking it back to the stocks after bathing it.

OM YANG CHANG BANGDI BANGTU BANGRU BANGTI PADA
BANG KAMU KUMAIA OM BANG SARAPA BANG OM RENGAB
CHANG RENGAB DAI RENGAB PITAI YAKAR OM RENGAB
RAKANGLANG KARAMI RENGAB PADA PAIAMAN PONG OM
RENGAB MAHA RENGAB.

39. This is a mantra which we repeat when we mount the elephant.

OM PANG PAHAMLOK PALAI PECHAH GALONG OM DIK
MAMAN.

40. This sets forth our powers when we are about to entice a solitary wild elephant into a noose by making it follow our tame elephants. If the wild elephant will not follow our animals, we repeat this mantra and then hurl some clods of earth at him.

MATAPU CHUMKAN MIDON YOH KAYU UMBI KAWAN
CHAMKAN LAMANG MANU RA AMBI KAYU AMBI KAWAN
TANGWAN TANGWAN PIRAK DUT PIRAK SITUN DURAJA
CHAMKAN LANTANGUN RA AMBI KAWAN TANGWAN TANGWAN.

41. This is the mantra we use when we beckon onwards a solitary wild elephant that will not follow our decoy elephant. We take some *chamar* leaves and repeat the mantra over them

MATAPU CHUMKAN LION NAKCHONG ABIA KASI'AN AMIA
KON CHOMKAN LION TANGKON PARIK DOS PARIK SITON
DUNANG MAKARU TANGKON.

Another way is to repeat the mantra over three lumps of earth which we then throw at the elephant.

42. This is the *perabun* charm that we use when we wish to catch a herd of tame loose elephants in the forest and find that a male wild elephant is with them. We walk round the herd either once or three times repeating the mantra.

OM PAU PANG MAHA PANG PIT OM TAU TAU SITI KAR-
TANA SAHOM OM SAUHOM.

As we finish these words we close our eyes.

43. If we go in amongst a herd of tame loose elephants and find a male wild elephant among them we repeat this mantra.

OM WI CHIT TRAWI KAM BARA AU LA SIPOH SUHOM
DAI BANG BENG KOMBANG TIPADA SAM KOM AH AH AH.

44. This mantra will forcibly detain a rogue elephant that is chasing us: we repeat it three times in one breath.

TOT PARTOT KANCHANG KANDAI KON PITAI TOT HAI.

45. This is a *perabun* charm which we use when we decoy a solitary wild elephant; with closed eyes we repeat it three times over a leaf and then thrust the leaf behind our left ear.

OM NAK KAMBANG BUKAMBANG THALABYU CHANG
HAI PAI.

Another general form of *perabun* charm for elephants is this. We repeat it over two leaves or over three leaves and then thrust the leaves behind our left ear.

OM NANG KAMBANG BUKAMBANG THALABYU CHANG
HAI PAI

46. When we wish to mount an elephant in a herd of tame elephants we repeat this mantra whether there is male wild elephant among the herd or not.

OM PANG PAHAMLAH PALAI PACHAH KALONG DIK
MIMA.

47. When a solitary wild elephant has joined our herd of decoy female elephants we use a mantra to prevent him from afterwards leaving them. We take three limes that grow on a single stem or better still five limes growing one single stem (if these cannot be obtained, two limes growing on a single stem will do), and we pick out the love-grass that has caught in our sarongs. We mix the two together and rub them over our female elephants. We also sprinkle betel-leaf and betel nut over their foreheads. Over the various ingredients mentioned we repeat this charm.

OM MA BANAK NIK MAKU AW MAK TIK MAK MAKAKA-
RAN MANINGKAL KAK KAN TIK.

48. This is a mantra to prevent a solitary wild elephant from fidgetting and disturbing a herd of tame elephants. We repeat it as we walk round the herd, which we do either once or three times.

OM KASAK KUA TARAK HAK CHAN JINSA NAK SILAK
SATAHA TIHAK WI SARA WIKAK WI TRAWA PUTAI YA
ATI YAN NIK MAKURI NACHUNG TANGU KAPURUNTA
SARA MAMA WI SARA WIKAKH WIPARU PURAK BINAT
SIAN TIK *bulan naik jangan bulan turun ikut turut kata
Sri Rama.*

[let the moon rise, let it not set: obey the word of Sri Rama.]

49. This is a mantra to make a solitary wild elephant, or a herd of wild elephants, stay in one place.

TOT SAPAR TOT CHANGLIUM CHANGKAN CHANG
SAMA KU DHANGTANG PARPIT SITI KAN GURU BATIK
PARAHAI KALU AH TOT.

50. This is a mantra to beckon onward a solitary wild elephant. We repeat it over a *chamar* leaf and then beckon to the elephant with the leaf three times. As we beckon we must not look behind us.

MATAPU CHOM KAN LION TANGKUAN PARAK DUN-
ANG MAKARU TANGKUAN TANGKUAN TANGKUAN.

51. When an elephant has been caught in our noose, this is a mantra to make it stupid, and to prevent it from inserting its tusks into the slip knot and working the noose open.

*Hei tunggal terkatup tertutup terkanching angkau
disuruh Sri Rama. Ah! Ah! Ah!* [Hei! solitary one!
thou art closed up, shut up, bolted up, and this by the
order of Sri Rama. Ah! Ah! Ah!]

52. To make a wild elephant amorous of our tame female elephants, we pick some of the weed *tutup bumi* that grows in the middle of the highroads and take it root and all. We chew it with betel leaf and betel nut, and then spit it out on the elephants' forehead and brows and both ears and both

cheeks. We must avoid passing in front of the elephants when we release them and their goads must be kept at home with the goads of our other elephants.

53. This is the medicine for a stubborn elephant that will not learn our schooling. We take some of the *nasi-nasi* plant that grows reflected in the water, and rub it over its chest by its heart and over both shoulders. We do this for three consecutive evenings.

54. This is the medicine to soften the heart of an elephant and make it docile. We take the smaller kind of *gelenggang* plant known as *gelenggang saior* and rub it over the elephant's chest for three consecutive evenings. The plant must be gathered at evening time. Another way of softening an elephant's heart is to repeat the following charm over its food (sugarcane or plantain) for three mornings or three evenings.

OM DARANG MUKANIA
 DARANG LANGLI MUKANIA LANGLI
Telunjuk ku akan kosa mu
Hati ku akan chucha mu
Tunduk tedurong kakiri ku
Tunduk tedurong kakanan ku
Kalau angkau ta'tunduk tedurong kapada aku
Angkau di sumpah-i Sri Rama
Tunduk jinak kapada aku
Kalau angkau ta'tunduk jinak kapada aku
Angkau di sumpah-i maha Rishi

OM RENGAB.

[My fore finger on your goad: my wish to subdue your wish. Bow down your head to the left. Bow down your head to the right. If you do not bow down your head to me, you will be cursed by Sri Rama. Bow down tamely to me. If you do not bow down tamely to me, you will be cursed by the Great Sages.]

55. To take away an elephant's ticklishness we take as medicine the great hairy caterpillars of the red kind and rub them over the elephant's thighs.

56. To cure an elephant of the trick of shaking itself free from its load, this is the medicine: we take the roots of the *galenggang* plant, the roots of the *trong asam* and the roots of the sensitive plant*; we chew them with betel leaf and betel nut and spit part of the mixture over the forehead of the elephant and then spit part over its testicles, and after this spit part over both cheeks and both thighs. We do this for two or three days.

Another cure is the following: we take the roots of the sensitive plant and some moss from a stone that has been standing in water, and burn them to ashes, which we then mix with oil, and rub over the elephant's cheeks and thighs.

Yet another way is to take the root of the large species of *galenggang* plant, and chew it with betel leaf and betel nut, and then spit over the elephant's cheeks and thighs for three consecutive days. The plant must be gathered at evening time.

57. This is a medicine to prevent an elephant from swinging its tail from side to side. We take the rubbish that collects about sticks in the water and about the posts which stand in the stream and shake to and fro with the force of the current. We burn this to ashes and mix the ashes with oil which we rub on the elephant's tail for three consecutive evenings.

58. To make an elephant subservient to the goad we take a handful of *kait kait* leaves and rub them over the elephant for three consecutive mornings or evenings; or else when we bathe the elephant. This is another way; if we put gold and silver in a bowl of water, and then bathe the elephant's head with the water, the elephant will without fail obey the goad with alacrity.

And this is yet another way; we take gold, silver, copper and the iron of which cannons are made, and place them in a bowl of water. With this water we then bathe the elephant's head, and at the same time we lay the goad upon its head. We do this for three consecutive days.

* *Mimosa pudica*

59. This is the medicine for an elephant that will not kneel at the word of command. We take the root of the male *kanchi* plant that has never flowered, and chew it up with betel leaf and betel nut and squirt over all the elephant's joints. We do this for two three or four days. Another way is to take the root of the gourd plant that creeps over abandoned houses and to chew this with betel nut and betel leaf and to squirt it over the elephant's thighs for two or three consecutive evenings. If an elephant will not kneel or refuses to kneel down in water, we take the moss off the stump of a tree that has been felled to make a boat. We burn the moss to ashes and mix it with oil and rub it on the elephant's forehead and on its thighs.

60. If an elephant refuses, or is afraid, to swim, we take the root of the *kiambang* plant and burn it to ashes which we mix with oil and rub on the elephant's forehead or on its thighs.

61. This is a list of the diseases, of elephants.

Mersud : a swelling of the tip of the trunk.

Merchuan : a swelling of the part under the chin.

Tasab : a swelling of the forehead.

Merkabat : a swelling of the eyes.

Keruan : a swelling of the ear.

Merpuan : a swelling in the stomach.

Mertemulam : a swelling of the genitals.

Mernor : a swelling of one leg.

Mertalam : a swelling of both legs.

Merchap : a swelling of the anus.

Merkabun : a swelling of the rectum.

Merpahat : a swelling of the end of the tail.

Keradan : a swelling of the tip of the trunk.

For this last disease the medicine is to take the leaves of *langkandi*, *prai*, *labu ayer* and *katang-katang tahi lembu* with some whitewash and some salt. We shred these ingredients, or grind them to paste and apply the mixture as a poultice to the swollen part.

The medicines for *tasab*, the swelling of the forehead, is to take the bark of the *ramanggi* and *dedap*, some *kunyit trus*, *lampuyang*, *lengkuas padang* and limes. We place these ingredients in a pot and boil them to shreds, and then apply the medicine to the elephant's forehead, and without fail the disease will be cured.

62. This is the medicine for *merkabat*, the swelling of the eyes. We take some oxhide and burn it to ashes; then add some oil, the leaves and roots of the *pria* and of the creeping gourd plant. We pound these ingredients to a pulp and mix some arrack with it. The whole compost is applied to the swollen part. It is a certain cure.

63. For the swelling of the ears we use this medicine. We take the fruit of the tamarind with limes of the varieties known as *limau mata kerbau*, *limau purut*, *limau krat lentang* and common limes and oranges; of all these we take the leaves and roots as well as the fruit; we chop them fine, and pound them well and then boil them in a pot. With the water we wash the swollen part, and apply the sediment as a poultice.

Now this is a medicine, which we should know, for all ailments of elephants. We take the roots of the *trong prat*, the bark leaves and fruit of some tamarind, the bark of the *kintongan*, common limes, the limes of the varieties known as *limau krat lentang*, *limau mata kerbau*, *limau purut*, *limau raia*; we take from a betel nut tree that has never fruited the young aerial roots that have not yet reached the ground; we also take *kunyit trus* of the white and black varieties, *lengkuas padang*, *lengkuas benar*, *temu lawak*, *halia udang* of the red kind, *juang juang* leaves of the red kind and *teberau*.

All these we pound to powder, and place in water for a night. With this water we wash the elephant all over for two or three days; the sediment we give it to eat in small quantities with its food. After this we should avoid letting the elephant feel the heat of the sun for a few days.

64. We now tell of all the medicines for the diseases of elephants. First of all there is this one which is handed down from

the *bomos* of old. We take the roots and leaves of the *pasamiu*, plantains of the variety known as *pisang miu* with the leaves and root of the plant; we add the roots of *chemandrai hitam*, *rotan tawar*, *tutup bumi*, *kenchar*, *pianggu*, *pulai hitam*, *rotan dini*, *panggil-panggil*, *jerun*, *kuchoi*, *galenggang*, *kaduduk*, *paku*, *tambun tahi*, *temu padang*, and *temu kunchi*; we also take limes of the varieties known as *limau purut* and *limau padang*, and the bark of the *kintong*. We mix all these ingredients thoroughly and then pound them to a pulp. The juice is given to the elephant to drink for three days, or is sprinkled all over its body for three consecutive evenings.

65. If an elephant has sore eyes so that it does not allow us to touch it and carries its head low, we sprinkle black pepper over its eyes for two or three consecutive evenings. If its eyes run with water, we blow at them through a tube either some lime juice or the clear water in which ashes have been standing; we do this for two or three consecutive evenings.

66. This is a medicine for a running discharge in an elephant's eyes. We take the fruit of the *mataiang* and burn it to ashes, which we then mix with water; we strain the water and add some lime juice; we then put this in the elephant's eyes for about three days, and of a certainty the discharge will stop.

67. This is the medicine for a disease of the trunk: we take from some well the vessel which men use to lower into the well to raise water; we take it rope and all, and burn it to ashes, which we mix with a little oil and rub on the end of the trunk. For this remedy to have effect the vessel must have been stolen from its owner.

68. This is a remedy for the disease known as *kesar api*. We take some *lenjuang merah*, the cabbage heart of the *teberau*, limes, *meswi*, red onions, turmeric and white pepper; after chewing these ingredients with betel nut and betel leaf, we squirt the mixture from our mouth over the elephant's body three times on three morning or three evenings. Another way

to pound these articles to powder, to which we add a little water and then sprinkle all over the elephant's body for about three consecutive days.

Another remedy is to take the root of the red *bunga raia*, and the root of the *jarang songsang*; we chew them with betel nut and betel leaf and squirt the mixture from our mouth upon the elephant for three consecutive days or evenings.

This is the medicine for an elephant which has the diseases known as *kesar ayer* or *kesar angin*.

We take about a *gantang* measure of *rembiga* leaves, pound them to pulp and rub them over the elephant's body; or, adding water, apply them as a wash—we do this for four or five days.

Another medicine for *kesar ayer* is as follows: of the *lenjuang puteh* we take the roots, the leaves, and the cabbage heart; we take leaves of the sensitive plant, the bark of the *bongli*, *kunyit trus* of both the black and white varieties *meswi*, red onions and white pepper. All these ingredients, we chew with betel nut and betel leaf and squirt from our mouth over the elephant's body; we do this for two or three days.

This is a cooling lotion. We take the fruit of the *kubong*, the leaves of the *bungkal* and the cabbage-heart of the *tebe-rau*; we pound them to pulp and soak them in an earthenware pot, and then apply for about three consecutive days or evenings.

As we apply it we repeat these words.

OM KAK TIU TIU SAK.

Yet another remedy for *kesar* is this: we take leaves of the *sentang hantu*, *mataiang*, and betel-nut tree; pound them to pulp and add a little whitewash, and rub the compound over the elephant's body for four or five days.

And yet another remedy: we take the red fruit that grows on sand banks, and any kind of fruit of trees whose early leaves are red, and give them to the elephant to eat with a little Siamese salt. Of this medicine we give, in small quantities, as much as the elephant will eat.

69. This is the remedy for fever ; we take *gandarusa* and chop it up fine, and soak it with cooked rice. Having done this, we put it out in the dew that night, and afterwards sprinkle it over the elephant's head for about three days.

We must be careful not to expose the elephant to the sun during this time.

70. This is the remedy for pains in the elephant's stomach : we take the bark and fruit of the tamarind and the bark of the *kintong*, the bark of *jambu kapal* and of the *sena*, the fruit of the *tevus rangkinang* and the *rangkirang kayu*, with its fruit and bark ; we pound all these things to a pulp which we give the elephant to eat together with Siamese salt ; we may also sprinkle it over the affected part.

71. This medicine kills all the diseases in an elephant's stomach : we take some ripe *trong prat*, *lengkuas padang*, Siamese salt, bark of the *malaka* that has been brought from foreign parts ; we split the *trong* and the *lengkuas* into strips, and then pound the mixture to a pulp ; then we soak it in vinegar, and after three days we give the liquid to the elephant to drink, and the sediment we mix with the elephant's food, or with a plantain or some sugar cane. We do this for three or four days.

72. This is the medicine for an elephant that is troubled with intestinal worms : we take the white and black varieties of *kunyit trus*, some black valley earth, the cabbage-heart of *teberau*, *meswi*, red onions, and white pepper ; we stuff a sugar cane with these ingredients or we mix them little by little with the elephant's food for two or three days repeating this mantra.

OM KAK TUI TUI SAK.

The following medicine will kill all the intestinal worms whose presence in an elephant's stomach prevents it from becoming fat and healthy : we take some saltpetre and carraway seed, and give as much of them as it will eat to the elephant. When we have done this for three or four consecutive days all the worms will be dead.

73. This is medicine for an elephant this is suffering from chill : we take the roots of *trong asam*, and of *rotan dini*,

the pith and roots of the *chekor*, *jerangau*, *lenjuang merah* and *kunyit trus*; adding a little white pepper, we chew this with betel leaf and betel nut and squirt the mixture from our mouths over the part of the elephant's body that is affected.

If the elephant's body is hot, we take *satawar hutan*, *balongan*, *satawar benar*, *anyor*, *tebu betong*, *lenjuang puteh*, *teberau*, *chapa* and *rotan tawar*; we shred all these very fine or pound them to pulp, and cook them with betel leaf and betel nut. We then squirt the mixture from our mouths, or sprinkle it over the elephant's body for two or three consecutive days.

The elephant must not be exposed to the sun during this treatment.

74. This is the remedy for a swollen foot, leg or shoulder: we take the inner part of some ginger, *kunyit trus*, turmeric, and *lampuyang*; we grind or pound them to pulp and adding a little salt, warm it on the fire; we then apply to the mixture the affected part for three or four days.

If an elephant's ear or leg is swollen we repeat this charm over it.

OM CHIKAN CHI CHAU SIMAN PALAI AITU RATI
DUCHANGU BAYI DUCHANG SAN BISAYI TAB.

75. This is the medicine for a sprain in an elephant: we take leaves of the *galenggang ramanggi* which people use as a vegetable, *nasi-nasi*, the juice of the *tebu salah*, the stem of the *kladi hitam* and a prawn of the variety known as *udang galah*; we bake all these until they are burnt and then put them in some flour which we warm and apply as a poultice to the affected part for three or four days.

76. This is a medicine to cure an elephant of eating earth: we take some earthworms and some black valley earth; we bake the worms until they are burnt and then mix them with the earth which we give to the elephant to eat for three or four days.

77. This is a medicine for an elephant that will not eat heartily: we take some *lengkuas padang* and *lengkuas benar*

and the root of the *pisang-pisang*, and pound them to a pulp which we mix with the elephant's food for three or four consecutive days or evenings.

78. This is medicine to make an elephant fat : we take some *tembakul* fish, and Siamese salt and give them to the elephant to eat. This must be done on the 13th to the 15th days of the month. When we administer this medicine the elephant must be standing in water that covers the swelling of its belly.

This is another remedy : we take *patawali* and the roots of the *trong prat*, *trong pipit*, *trong asam* and *mataiang* ; we chop them very fine and soak them in some large vessel, adding a little vinegar and Siamese salt ; then we give it to the elephant to eat, or we rub it over its body. This must be done the moon is rising.

This is another remedy : we take the roots and leaves of the *lenjuang benar*, *lenjuang puteh*, the aerial roots of the betel nut tree, the roots of *rambiga* and *mataiang* and some Siamese salt. We give this medicine to the elephant to eat with some plantains, Indian corn or sugar cane, either when it is standing in water as before, or when the moon is rising.

This is another remedy : we take the skin of a rhinoceros' navel and soak it in water with some Siamese salt and some honey. Then we give the elephant the skin to eat with its food : we pour the liquid over the elephant and give it some to drink. We do this for three or four consecutive days.

Yet another remedy is to soak *pedindang* fruit and Siamese salt in honey. We then give the elephant the skin of the fruit to eat ; the liquid we either pour over it or give it to drink for three or four consecutive days.

79. This is the charm we use when for the first time we put the pannier upon a new elephant that has never been used before. We first sprinkle the elephant with *tepong tawar* [ceremonial flour] which we address as follows.

Hei Tepong tawar, tepong jati, tepong tawar
Seklian changrai dan bahdi
Turun changrai, turun bahdi, turun pilak
Turun kadalam laut Pauh Janggi.

[Hail, Tepong tawar, pure flour ! Hail, all the mischievous and evil influences ! Let all the mischievous and evil influences and all misfortunes descend into the sea of Pauh Janggi.]

We then put the pannier on the elephant's back, and sprinkle the water of a young green cocoanut, one over its head and another over the base of its tail. We then throw the cocoanuts at the elephant, the one at its head and the other at its back, and take an augury from the manner of their falling : if they fall on the part that has been opened it is a bad sign, but it is a good sign if they fall with the open part uppermost. While doing this we repeat this mantra.

OM PAT MAHAPAT CHAILA KUPAT KARU HEI CHANG-
RAI MAYU TAWI SAH.

As soon as we have repeated this mantra we get up into the pannier.

80. This medicine will make our elephant come back to our house of its own accord from the forest.

From an abandoned house we take the cooking place, the ladder that leads up to the house and the threshold beam. We break them up and give fragments of them to the elephant to eat with plantains or Indian corn, and do this for three consecutive days or evenings.

81. This will make an elephant brave in fighting. We take a considerable quantity the roots of the *ketub-ketub* and *panggih-panggih* and pound them into pulp, and give them to the elephant in his food for three consecutive mornings or evenings. This is certain to make the elephant courageous.

82. This will make an elephant sagacious. We take the bark of the *ramanggi*, the bark and ripe fruit of the tamarind juice of the ordinary lime and of the variety of sugarcane, known as *tebu betong* and add them to the elephant's food for three consecutive days. Its effect is certain.

When giving this medicine we repeat this mantra.

SUKI TIMA SAPAHA CHARAU SOK SI RA AR ASAUPA
KATA YASA SIMA TONKHA TIRU KISARO ASAM PINTU

Before we administer any of the medicines mentioned above we should breathe over the following mantra three times, in order to prevent any harm happening to us or to anything connected with us.

OM BIRANDOK RANDAI KAPARAI PARAI PANDOM
SHAROK SAHAROK NYAYOM LI CHAPALOK NAJAM
PALING CHAMCHAK IRAK KAN CHAMBOT NACHAM NU
LANGMU TARANGKOK MITAROM CHANG TAPING TAU
PERIA LAMUNTARI PUAH RENGAB.

This is an alternative mantra.

OM CHATING CHATING HAKA TANGKAU CHANGKAN
BAT KAU TABAT NARIT KONKU SUROH LULOH LULAI
PIAH TAUTAR AU YARA WON SATAHA TARA ONG
JIBAYON TAHOM BAAMAN MIOK KATA AUL.

83. This is the remedy to use when a person has been affected by *chemahang*, which means in the Malay language the evil influences attendant on elephants or trees, or when a person is affected by *changrai* or by strong *bahdi*. We take the resin that exudes from the *merbau* tree and *chamara petri* and *empelas* leaves, and water from the joints of trees and water from a pig's wallow and ripe fallen limes; we knead them to a pulp with which we besmear the sufferer. And, if God wills, he will recover.

84. This chapter deals with the methods of telling a good elephant from a bad one.

We have to look at the elephant's shape, its stride, its ears, its skin, and at any individual peculiarities or markings that it may have.

Ears so broad that they will meet, a long lobe to the ear, a low forehead, a very long trunk, a tail that reaches to the ground and sweeps its dust, a broad flank, a head that wags to right and left as the animal walks, and tusks that reach down to the ground; if one finds all these points in one animal, it is, according to the *bomos* of old, a very bad sign, and such an elephant will bring poverty upon its owner.

It is very good to find in one animal long ear lobes that lie close to the cheek, a long tip to the trunk and a high fore-

head ; and an elephant like this will bring wealth and comfort to its master.

An elephant with a short lobe to the ear, the fold of the ear turning outwards and the ear itself being short ; that rocks itself to and fro when standing, that swings its trunk and its tail, and wags its head as it walks ; an elephant like this is not good and will eventually bring loss upon its owner and its own life will be short.

An elephant is a good one if it has the following points, the lower lip close to the upper lip, the lobe to the ear close to the cheek, and the folds of the ear and the tip of the ear turning inwards.

An elephant with twenty white and closely set toes, a long under lip and large testicles is a very good and lucky one.

If the protuberances on the elephant's head are twelve in number, or if it has fourteen toes, or fifteen toes, or if the hairs of its tail grow in two different ways, or if the tip of its tongue is black or its eyes red, the animal is an evil brute that will bring ill health and sickness upon any one that keeps it.

An elephant with protuberances on its tail, and under its chin and with all its toes black is no good, neither is one with protuberances on its ears especially if they be black or red like blood.

An elephant with a black roof to its mouth or with black at the base of its tongue is no good.

It is a good sign in an elephant if after eating it carefully places in front of it all the food that is left over. It is a bad sign if it scatters its superfluous food right and left.

It is a very bad thing for an elephant to have its tusks streaked with black or red, or to have tusks that cross one another or that curve outwards.

This is the end of the book of mantras used in connexion with elephants, finished on the 27th day of Rajab 1296 ; taken from the mantras of Tunku Mantri Ibrahim bin Jafar, which are in the possession of Che Pandak Abdullah and committed to writing by Toh Sarif Aman ; mantras which have come down

from the Datohs Sri Adika Raja of Ulu Perak, Toh Kalaung and Toh Kalalang, to Toh Muda Abdulrauf and from him to the present day.

APPENDIX I.

The Malay system of Elephant Catching and Training.

The method of taking a herd of elephants is probably common to all countries : in a place frequently visited by a herd the Malays build an enclosure either of timber, (when it is called a *kubu*) or strengthened by earth work (when it is called a *pendiat*). It is protected by a deep and wide ditch. Long wings of fallen logs lead the way into the gate of the enclosure, which is known as the "smaller enclosure." All round an area of some miles of the forest in front of this enclosure a line is cleared, and in it little erections of a few branches and palm leaves are built in the trees at regular intervals. As soon as the herd has entered the circumscribed area, which is known as the "larger enclosure" men are stationed day and night in these trees with fires burning, to prevent the elephants from moving out again before all the hundreds of men who are necessary for a drive can be collected. When the elephants have been driven into the "smaller enclosure," a great suspended door is dropped, and all exit prevented.

A solitary elephant is made a victim to female influence. He is induced to join the society of three or four tame cow elephants which are let loose in the forest, and when he has become accustomed to them, the Malays arrange on the ground, in some convenient place between two trees, a rotan noose with the ordinary running knot.

Coming up to the elephant and his harem then on other tame elephants they gently urge the herd towards this noose. A female elephant that is new to him then attracts the atten-

tion of the male, and he moves forward to caress her. Urged by the surrounding elephants she moves slowly towards the noose and steps into, and out of, it in safety. The male follows in her footsteps, and as he plants his foot a Malay pulls the knot and he is caught. Of course he rushes away at once, but at the end of the line attached to the noose is a heavy mass of branches which act as an effectual drag upon his progress. Fatigue soon makes him go slower, and then the elephants close upon him again and while two great cows press upon him on either side, a Malay slips a noose upon another leg. Soon each leg is noosed, and then in some convenient place the ends of all four nooses are made fast to trees, and the elephant is a prisoner.

An elephant, whether caught with a herd or in a noose, is kept tied up until it has been thoroughly subdued and quiet, and will submit to being washed and handled. Hobbles are then put on it, and then, tied to another elephant, it is taken down to the river to bathe. From this stage its domestication is gradual.

Then comes its tuition. Under the Malay system every elephant, even one born in captivity and brought up from its birth in the village, has to be taught the words of command in the barbarous cruelty of the *chelony* or stocks. Here it is confined in such a position that it cannot move an inch in any direction while it learns its lessons.

In seven to ten days a clever village reared elephant will have learnt enough to earn its release from the stocks. A wild elephant will require forty to a hundred days.

After this a forest-caught animal is taken about tied to a tame elephant, and gradually the rotans that join them are lengthened, until at last the elephant can be trusted to be let loose. It drags long rotans after it for some time however so that if it attempts to escape it can be easily seized again.

A year should be allowed to elapse between the date of an elephant's being taken out of the stocks and of its being put to use as a beast of burden. During this time it is being perfected in the lessons learnt in the stocks.

APPENDIX II.

*Words of Command used in driving Elephants
in Perak and Kedah.*

PERAK.

- Tee-tee—Stand still ! Keep quiet !
 Tuhuh-tuhuh—Go back ! Move backwards !
 Dee-dee—Come close ! (Used in calling the elephant.)
 Hee-hee—Go on !
 Umbû—Go to the right !
 Klong—Go to the left !
 Kohoi-kohoi—Go slowly !
 Chîn—Go carefully ! (Used where the road is slippery, or
 going down a steep bank, or through a deep swamp.)
 Rabah—Feel !
 Kwêt—Pull down ! (Used in directing the elephant to remove
 any stick or branch obstructing the path.)
 Onh—Push ! (Used in ordering the elephant to push down
 a perpendicular obstacle, as a post, or trees, stump.)
 Hoh-hoh—Stop !
 Riap—Approach ! (Used in ordering an elephant to go along
 side of a Malay house or pĕlantar. He will bring
 his head close if riap is said. For the hind-quarters
 the order is Riap buntut.)
 Tĕrum—Kneel down !
 Terum puan—Kneel down lower !
 Tah—Get up !
 Paha'mbû—Keep clear of timber on the right !
 Paha klong—Keep clear of timber on the left.
 Chelût—Let the howdah slip off ; (The gambala (driver) is on the
 ground.) At this word of command the animal lowers
 his hind-quarters and lets the rengka slip over his tail.
 Tû-i—(Employed to make the elephant stop switching his
 tail and striking his occupants of the rengka with it.)

- Cheng—Put the right foot into the hobbles (sengkala.)
 Cherot—Same for the left foot.
 Chang—Lift the foot! (To have the sengkāla taken off.)
 Tee-tee—Dont! (Used when the elephant takes up water or saliva in his trunk and sprinkles his sides with it.)
 San—Let go! (Used when the animal squeezes the gambala's legs with its ears behind which he sits.)
 Guling—Roll! (in the water). An elephant being bathed will when told to do so and will get up when roll bangkit or tah is said.
 Kot, kot, kot,—(Used in driving an elephant home if, when the gambala has found him, he is too dirty and muddy to be ridden. He will go stright home in front of his gambala at this word of command.)
 Riang-riang—Let go! (Used when an elephant objecting to have the tali rūt (rattan rope passing under the belly) fastened, puts up one his forelegs and presses it against his body to prevent the rope from being pulled tight.)

KEDAH.

- Go on! Hee.
 Come! Chee, Cham.
 Stop! Hoh.
 Turn! Dao (same for right or left.)
 Kneel down! Těrum.
 Get up! Puan.
 Move aside! (to avoid a tree), Pei.
 Come close! Chit.
 Pull down! (a branch), Ao-bûn
 Push down! Kwît.
 Take care! (e.g., in crossing a bridge.) Koy.
 Feel! (with the trunk) Klam.
 Climb! Kot.
 Stoop down! (head only to let a man get up.) Lât.
 Lift up one leg! (to let a man get up) Song.
 Don't! Dei.

Don't whisk the tail! Tû-i.
 Trumpet! Riak.
 Salaam! (by lifting the trunk) Wei.
 Pick up! Jûn.
 Swim! Chû.

APPENDIX III.

List of some of the Technical Terms used in connexion with the Training of Elephants.

Balei Chelong—The covered in enclosure in front of the stocks.
 Here the trainer receives his friends and visitors.

Tiang Guru—A stout post in the middle of the *balei chelong*.

It is used as a table, and on it are kept all the paraphernalia used in connexion with the elephant's training. It is sprinkled with *tepong tawar* before the training begins, and may not be touched by any one but the trainer.

Galang renat—Stout beams laid on the ground, upon which planks (termed *kayu renat*) are laid. The flooring of the stocks is this above the level of the ground, and the place is easily drained.

Anak Chelong—The two great posts between which the elephant's neck is firmly held.

Galang rusok—The two beams which are fastened at one end to the *anak chelong*, and, running along the elephant's ribs, prevent it from moving its body to right or left.

Galang dada—A stout beam, supported on forked sticks, which passes under the elephant's chest, and thus prevents it from lying down.

Sengkala—Hobbles which bind the forelegs together, and the hind legs together.

Chanang—A small piece of wood fastened between the two *anak chelong* to prevent the elephant from pushing a fore foot between the posts.

Tali Teronching—A broad rattan band round the elephant's hind legs. From it a twisted rattan rope ties the hind legs to any convenient tree or post.

Tali Pul—A rattan which ties each fore leg to the *anak chelong*. [Thus the elephant is in this helpless condition—its neck is firmly nipped and held in by two posts, its sides are wedged between beams, and a beam runs under its chest; its fore legs are not only tied together but also tied to the posts that hold its neck, while as an additional precaution the *chanang* prevents any possible movement; the hind legs are tied together, and also attached to convenient posts.

When one understands what this means, and realizes that a forest caught elephant undergoes from forty to a hundred days of this treatment (the hundred days, let it be understood, being the limit not of the elephant's refusal to submit to training but of its tenacity of life) it is not difficult to believe that the epitaph of great percentage of forest caught elephants is "*mati dalam chelong*"—it died in the stocks.]

Tali Tegun—When the elephant is first taken out of the stocks down to the water to bathe, it bears a skeleton frame work of rattans, in the form of the harness of the panniers (*rengka*) that it is to be taught to wear. The rattans are fitted on to its neck, round its belly, under its tail in exactly the same way as the *rengka* harness. This frame work, which is termed *tali tegun*, serves the double purpose making the animal accustomed to the feel of the harness and of allowing the trainer a safe hold for his scrambles up to, over, and down from, his charge.

Saluar—When an elephant first leaves the *chelong* it wears, suspended from the *tali tegun*, a loose rattan round each leg. These are known as *saluar* (trousers) and by means of them to animal if it becomes obstreperous can easily be tied up.

Tali Taham—A rattan collar round the elephant's neck, by means of which a rattan rope (*tali chawak* firmly binds a half trained elephant up to a trained animal. It is used when a half trained elephant is first allowed out of the stocks. When the elephants are tied closely together, the term is *Chawak Imba*. When the elephant is getting broken in, a little distance is allowed between it and the other animal, and the term is *Chawak Puchong*. Last of all, when the elephant is quite tame the animals are separated by a considerable length of rattan which is considered as little more than a more precaution. This is known as *Chawak Wai*.

Sedang—The technical term for the progress of an elephant's instruction.

Pancharuan—A short stick tipped with a sharp piece of iron.

It is only used to "remind" the elephant. A longer stick tipped in the same way with iron is called a *tanjak*, and is used to hurt the animal. Both *pancharuan* and *tanjak* are unlike the goad (*kosa*) with which the trained elephant is driven.

Pulang Pohon—"The return of the season." The term for the twelvemonth which should elapse between an elephant's being put in the *chelong* and its first having a *rengka* (pannier) put on it.

Barak—During this twelvemonth, the elephant is known as *Gajah Barak*. At the end of the period, when the new *rengka* has been put on the animal with all due ceremonies, the *gambala* takes the animal from house to house calling out "barak" "barak," and everyone gives him something, a little rice, some fruit or a fowl.

At the end of the day, the elephant driver gives a feast to his friends.

Patih Kosa—The technical expression for an animal that is perfectly obedient to the goad.

This is one of the pantuns the *gambalas* sing as they wash their animals.

Tarek puntong batang jarak
Batang resam chondong k'ulu
Tarek lah untong angkau ini barak
Mengikut resam zaman dahulu

APPENDIX IV.

List of plants used as Medicines.

BY H. N. RIDLEY.

Anyor.—*Curculigo recurvata*. (Amaryllideae) commonly known as Lumbah, a common broad-leaved plant with yellow flowers at the base.

Balongan, or Bulongan.—*Canthium parvifolium* Roxb, or *Gmelina villosa*.

Both of these plants to which the name is applied are thorny shrubs, with acid yellow fruit. The fruit of the latter preserved in syrup is used in consumption by the Malays, and rubbed with lime and garlic on the body for dropsy.

Bongli.—*Zingiber Casumunar* Roxb. A ginger often met with in waste ground in villages, a common ingredient in Native Medicine. The rhizome is used.

Bungaraiah.—The common red *Hibiscus H. rosu sivenessis*. The flowers are often used as a demulcent.

Bungkal prob.—*Ctenolophon parvifolius*. A tree.

Chamar—*Zingiber*? sp. A wild jungle ginger.

Chamara petri—Chamara is the *Casuarinia equisetifolia*.

Chapa—*Blumea balsamifera* (Compositae) also known as Sem-bong, a tall herb with a strong camphoraceous odour. The dried leaves used in a variety of diseases, for colds, colic, etc. Powdered and blown up the nose of a horse they are supposed to cure it of a cold.

Chekor.—*Koempferia galanga*, L. A small kind of ginger with broad flat leaves white flowers and an aromatic rhizome, often cultivated, probably native of India or Siam.

Gandarussa.—*Jasticia Gendarassa* (A canttiaceae) a shrubby plant with narrow leaves, common in villages, and of unknown origin, commonly used in Medicine for all kinds of ailments, and also in Magic.

Halia Udaug.—Hahyabara small leaved ginger (*Scitamineae*) A slender wild ginger with a small rhizome, inhabiting forests.

Tambu Kapal—*Engenia Malaccensis* var. A very big variety.

Jarang Songsang—*Cymbidium Finlaysonianum* (*Orchideae*.)

Jeringau.—*Acorus Calamus* L (*Aroidae*) The sweet Flag, a native of the North Temperate zone, and probably, introduced here from China, a swamp-plant with long sword shaped leaves and an aromatic rhizome commonly planted in villages and much used in medicine.

Chemandrai hitam.—A herbaceous plant apparently one of the *compositae*.

Dedap.—*Erythrina* sp. (*Leguminosae*). The commonest species here is *E. Stricta*.

None of the species are really wild here, but are cultivated as props for pepper etc.

Empelas.—*Tetracera Assa* (*Dilleniaceae*). A chimbre with white flowers.

Gelenggang.—*Cassia alata*, (*Leguminosae*). A shrub with orange flowers in spikes probably originally American now widely dispersed all over the tropics. The leaves applied externally are a well-known remedy for Kurap, and other skin diseases, used internally are purgative.

Gelenggang sacar *Cassia Tora*.

A common weed in villages, with yellow flowers and long beans, the seeds of which are in some places used to make coffee.

Jerun.

Juang-Juang—*Dracaena Parteri* Liliaceae and other wild Dracaenas. Low shrubs with broad or narrow green leaves, and spikes or panicles of white flowers, with no known properties. Senjuang and Lenjuang appear to be used as synonyms.

Lenjuang merah is *Cordylire*—var *ferrea*, the red Dracaena of gardens, a native of the Polynesian Islands.

Lenjuang putih is I believe the green leaved form.

Lenjuang Benar, is probably *Dianella ensifolia*.

A common liliaceous plant with yellowish white or blue flowers and berries.

None of the plants seem to have any properties at all.

Kaduduk, commonly known in the south as Senduduk, *Melastoma malabathricum* a (*Melastomaceae*) A common pink flowered shrub. The leaves are astringent and used in dysentery.

Kait-kait.—*Uncaria* spp. (*Rubiaceae*) The wild gambiers; climbing shrubs with hooks, (whence the Malay name) are indiscriminately known as akar kait-kait.

Kanchi.

Katang-katang Tahi Lembu.

Kenchar ? Kenchur *i.e.* Chekur.

Katub-katub, ketop-ketop, *Bauhinia bidentate* and other species (*Leguminosae*) Woody climbers with orange or red flowers.

Kiambang.—*Pistia Stratiotes* (Aroideae) The Waterlettuce, a common floating plant, with a rosette of velvety leaves often cultivated by Chinese to feed pigs.

Kintong ; kintongan.

K'ladi hitam, *Xanthosoma violaccum*, A cultivated aroid introduced from S. America.

Kubong.

Kuchai, Chives, The common little onion grown here as spring onions.

Kunyit, Turmeric ; (*Curcuma longa*)

Labu, Labu Ayer Pumpkin, *Cucurbita pepo* L (*curcúrbitaceae*.)

Lampuyang, *Zingiber Zerumbet* Roxb. (*Scitamineae*) A ginger commonly met with in villages, with an aromatic rhizome.

Langkandi *Vitex Langundi* (*Verbenaceae*). An aromatic shrub with blue flowers, very commonly used in native medicine.

Lengkuas benar, *Alpinia Galanga* L (*Scitanineae*) the greater Galangale, a tall herb with white flowers, and an aromatic rhizome, used in curries and also in native medicine.

Lengkuas padong, *Alpinia conchigera* Griff. A shorter and more slender wild species common in damp spots, often in villages.

Lenjuang, see Juang-Juang.

Malaka, *Phyllanthus pectintus* Hook fil. (*Euphorbiaceae*). A tree with very fine foliage, and globular acid fruit.

Mataiang. *Ardisia* sp.

Merbau.—*Afzelia palembanica* (*Leguminosae*). The well known timber tree.

Meswi.—*Cinnamomum, xanthoneurum* (*Laurineae*). The bark of this tree known in trade as Massoi bark, is imported into Singapore from New Guinea. It is very aromatic.

- Nasi-nasi.—*Eugenia zeylanica* (*Myrtaceae*). A tree or shrub growing often near the water, with white flowers and white aromatic fruit.
- Paku.—Fern.
- Pasamiu.—? Pisang minu, *Musa Malaccensiss*, a wild Banana.
- Panggil-Panggil.
- Patawali.—*Tinospora cordifolia*.
- Pedindang.—*Trichosanthes* (*Cucurbitaceae*). A climbing wild pumpkin with brilliant red fruit stated commonly to be "Mabok" is poisonous but not deadly only used in medicine so far as I know in cases of headache where the fruit is plastered on the head.
- Pianga.—*Clerodendron nutaus* Wall (*Verbenaceae*). A jungle shrub with white flowers. Properties unknown.
- Pisang-Pisang.—A name applied to a number of anonaceous trees on account of the resemblance of the fruit to bunches of plantains.
- Prai.—*Elateriospermum Tapos* Miq. (*Euphorbiaceae*). A big tree the seed of which is eaten, and forms in some parts of the peninsula an important article of food to the Sakais.
- Pria.—*Momordica Charantia* (*Cucurbitaceae*). A popular vegetable of unknown origin. The fruits are yellow and wrinkled, with seed enclosed in red pulp commonly cultivated.
- Pulai hitam.
- Ramunggai or Morungei.—*Moringa pterygosperma* (*Moringaceae*)
A shrub or small tree commonly known as the Horseradish tree probably a native of India. The leaves, fruit and roots are all eaten

Rambega *Calotropis procera*, (*Asclepiadeae*). The Mudar fibre plant, Native of India, half cultivated and occurring sporadically in sandy spots.

Rangrinang Kayu.

Rotan Dini.

Rotan Tawar. ? *Calamus aquatilis* Ridl.

Salanchang.

Setawar benar. *Castus speciosus* L (*Scitamineae*). A common plant with large white flowers on the edges of woods. Properties unknown, but popular among the Malays in medicine and magic.

Setawar hutan. *Forrestia Griffithii* Clarke (*Commelinaceae*) a hairy herb four or five feet tall, common in forests.

Sena. *Pterocarpus indicus* L (*Leguminosae*) a well known tree.

I take this to be the drug referred to in this paper, as the bark is the part used. But "Sena" is also used for what is properly called Sena Makki the Senna leaves of commerce, a well known purgative imported from Arabia (*Cassia angustifolia* Vahl)

Sentang hutan *Ixora* ?

Tambun Tahi, *Baccaurea* sp. (*Euphorbiaceae*).

Tebrau.—*Saccharum Arundinaceum*. Elephant-grass (*Gramineae*). A large kind of wild sugar cane common on river banks.

Temu padang.—*Curcuma*. sp. Temu hitam.

Temu Kunchi.—*Gastrochilus pauduratus* Ridl. A small ginger with an aromatic rhizome much valued in native medicine.

Temu Lawak.—*Curcuma Zedoaria* Rose. A half wild turmeric, the zedoary common in villages. The rhizomes are

often sold in the bazaar, and used in curry, and in medicine. Formerly valued as a drug in European pharmacy.

Tepus Rang Rinang.

Trong asam.—*Solanum ferox* (*Solanaceae*)

Trong pipit.—*Solanum sarmentosum*.

Trong prat.—*S. indicum*.

Tutup Bumi.—*Elephantopus scaber* (*Compositae*). A common weed with flat leaves and small pink flowers in a head, occurring in grass plots and waste ground, probably introduced from South America, a decoction of the roots is used for coughs by the Malays.